IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appl. No.	:	10/749,524	Confirmation No.	8682
Appellants	:	Charles Cameron Brackett		
Filed	:	01/02/2004		
Group Art Unit	:	2167		
Examiner	:	Robert M. Timblin		
Title	:	SYSTEM AND METHOD FOR MANAGING LARGE DATA SETS		
Atty. Docket No.	:	CRNI.110413		
Customer No.	:	46169		

VIA EFS-WEB SUBMISSION – 6/30/2008

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

APPELLANTS' REPLY BRIEF

The following is Appellants' Reply Brief to the Examiner's Answer dated April 28, 2008. Having a two-month response date of June 30, 2008 (since June 28, 2008 falls on a Saturday), Appellants respectfully submit the following:

I. STATUS OF CLAIMS

Claims 1-29 are pending and rejected, and the rejection of each of claims 1-29 is being appealed.

II. GROUNDS OF REJECTIONS TO BE REVIEWED ON APPEAL

A) Claims 1-6, 8-13, and 28-29 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,891,920 to Minyard et al. ("Minyard").

B) Claims 7 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Minyard in view of U.S. Patent Application Publication No. 2005/0050552 by Fuller ("Fuller").

C) Claims 15-20 and 22-27 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Minyard in view of U.S. Patent Application Publication No. 2002/0016718 by Rothschild et al. et al. ("Rothschild").

D) Claim 21 stands rejected under 35 U.S.C. § 103 (a) as being unpatentable over Minyard and Rothschild in view of Fuller.

Appellants respectfully traverse the rejection of these claims.

III. ARGUMENT

Appellants respectfully submit that all previously presented arguments as set forth in the Appeal Brief dated February 4, 2008 are considered relevant to this Appeal. The absence herein of any argument from that paper is not intended to convey concession on a particular ground of the Appeal. The following remarks are submitted in addition to that paper and in reply to the arguments conveyed in the Examiner's Answer dated April 28, 2008.

A) The Examiner has erred by interpreting "sequence" in Minyard as a "subset" of a working set as recited in the claims

Each of the independent claims recite a feature directed to automatically selecting, distributing, and/or transferring a subset of studies from a working set. For instance, independent claim 1 recites "selecting at least one subset of the received studies from at least one working set" and "automatically distributing the at least one subset of studies." Independent claim 8 recites "automatically selecting at least one subset of studies from at least one working set" and "automatically distributing the selected at least one subset of studies." Independent claim 15 recites "automatically transferring a selected subset of the existing studies." Independent claim 22 recites "automatically transferring a selected subset of the studies." Finally, independent claim 28 recites "automatically selecting at least one subset of studies from at least one working set" and "automatically distributing at least one subset of studies."

In rejecting the claims, the Examiner has relied on Minyard's discussion of selecting an anticipated sequence of images in an attempt to find the claimed features of automatically selecting/distributing/transferring a subset of images from a working set. For instance, Minyard discusses "determining an anticipated sequence for an image review session by a physician." *Minyard*, col. 3, lines 53-55. In the Examiner's Answer, the Examiner has alleged that Minyard discloses the recited selecting/distributing/transferring a subset of images from a working set "because a sequence is selected for a particular physician." *Examiner's Answer*, p. 18.

Appellants respectfully disagree with this conclusion. Simply because Minyard discusses selecting an anticipated sequence for a set of images, it is a leap in logic to conclude that the anticipated sequence comprises a subset of images. An anticipated sequence as used in Minyard simply refers to ordering of the images. The Examiner has not provided any explanation why one skilled in the art would interpret the anticipated image sequence in Minyard as a subset of images from a working set, nor would one skilled in the art understand Minyard's discussion of an anticipated image sequence as a subset of images from a working set. The Examiner has not pointed to any portion of Minyard that suggests the anticipated image sequence is a subset of images. Instead, it appears that the Examiner has applied hindsight reasoning in an attempt to read the claimed features into the cited art.

B) Minyard fails to describe the combination of selecting and distributing a subset of studies to review station(s) and subsequently transferring additional studies to a review station upon detecting user activities at that review station

Independent claim 28 recites features that include the combination of: (1) first selecting and distributing a subset of studies from a working set to a number of workstations; (2) monitoring the review stations for user activities; and (3) upon detecting a user activity at a given review station, transferring additional studies to that given review station. Independent claims 15 and 22 include similar features but specifically recite a login as the user activity.

The Examiner has alleged that Minyard discloses these features (except for a login as the specific user activity in claims 15 and 22 as will be discussed in further detail below). Appellants respectfully disagree. Appellants respectfully submit that Minyard is not concerned with and does not disclose first distributing a subset of studies from a working set to a review station and then transferring additional studies from the working set to the review station upon detecting a user activity at the review station. At best, Minyard discusses either caching images at a review station or transferring images to a review station when selected by a physician.

Minyard, however, does not disclose the claimed process in which review stations are first primed with a subset of images from working set so that some images are available for review upon demand by a physician, monitoring the review stations for user activity, and then transferring additional studies from the working set to a given review station upon detecting user activity at that review station.

C) Minyard and Rothschild fail to teach or suggest all limitations of claims 15 and 22 and the Examiner has not provided any apparent reason why one skilled in the art would have modified the references to achieve the claimed invention

As noted above, independent claims 15 and 22 recite a process similar to that recited by claim 28, but recite monitoring/detecting a login as a specific user activity. In particular, both independent claims 15 and 22 recites features directed to: (1) first transferring a subset of studies to a review station; (2) monitoring the review station for a login; and (3) populating the review station with additional studies upon detecting a login. The Examiner acknowledges that Minyard fails to teach monitoring a review station for a login and providing additional studies to the review station upon detecting the login. In an attempt to cure the deficiencies of Minyard, the Examiner relies on Rothschild. Rothschild discusses either pushing images to a remote location as images are received or waiting for an event to push the images to the remote location. However, Rothschild does not discuss a combination. Just as in Minyard, Rothschild fails to discuss the claimed approach of first transferring a subset of studies to a review station and then transferring additional studies to the review station when some user activity (i.e., a login in claims 15 and 22) is detected at the review station.

The Examiner has not provided any apparent reason why one skilled in the art would have modified and/or combined Minyard and Rothschild to achieve the claimed invention. The invention of claims 15 and 22 are a different approach to those discussed in Minyard and Rothschild. Minyard and Rothschild merely reflect prior art approaches discussed in the

Background of the Specification of the present application, in which studies are either retrieved on demand or automatically routed/pushed to some or all review stations. *See, e.g., Specification*, ¶¶ [0006]-[0008]. The claimed invention, however, is not simply a combination of these two mutually exclusive approaches of either caching all images or retrieving all images on demand as in Minyard and Fuller. As such, to achieve the claimed invention, Minyard and/or Rothschild would have to be completely reconfigured in that only a subset of images would first be transferred and then additional studies would subsequently be transferred upon a user login. However, there is nothing in Minyard and/or Rothschild or elsewhere in the art to suggest such a different approach.

In an attempt to modify Minyard and Rothschild to achieve the claimed invention, the Examiner's Answer posits that because Minyard discusses storing images in cache storage at an image review platform, "Minyard's review platform would only be able to hold so many image files until new ones are needed (e.g., more images to be reviewed in sequence)." *See Examiner's Answer*, p. 26-27. Appellants respectfully submit that the Examiner is improperly jumping to conclusions. There is nothing in Minyard to suggest that only a portion of an image sequence could be transferred to an image review platform because the image sequence is too large to be stored in storage of the image review platform. Instead, Minyard simply discusses transferring a sequence of images to be cached at the image review platform. There is no indication that the storage is too small to contain the entire sequence nor is there any suggestion in Minyard or elsewhere for one skilled in the art to conclude that the storage at the image review platform in Minyard is too small to contain the entire sequence. Appellants respectfully submit that the statement in the Examiner's Answer is impermissibly applying hindsight reasoning in an attempt to find the claimed invention obvious. Additionally, Appellants note that the Examiner's Answer is misleading as it continuously refers to Minyard as storing images in a cache memory.

However, Minyard merely indicates that the images may be stored in a cache storage at a image review platform. *See, e.g., Minyard*, col. 3, line 66 – col. 4, line 2. As is known in the art, computing devices may have extremely large storage capacities for caching data. As such, there is no basis for the Examiner to conclude that the cache storage could not store all images from a sequence.

D) Fuller is not concerned with transferring data over a network as in claims 7, 14, and 21

Claims 7, 14, and 21 recite features directed to monitoring each review station for a low buffer threshold and re-populating any review station reaching the low buffer threshold with additional studies. The Examiner has relied on Fuller for this feature. However, Fuller is inapplicable to the claimed invention. Fuller is concerned with delivering data from a device driver to an application within a computer. It is irrelevant to transferring data to a review station over a network as in the claimed invention.

The Examiner's Answer states that Fuller is relevant because the "device driver retrieves its data from a network, such as the internet." *Examiner's Answer*, p. 24. However, from where the device driver obtains its data in Fuller is irrelevant to the process of delivering data from the device driver to the application and the operation of the data queue between the device driver and the application. Appellants respectfully traverse the statement that "Fuller is concerned with delivering data from a network source . . . and populating a data queue with that data upon determining that is [sic] has breached a low-threshold value." *Examiner's Answer*, p. 24. As noted above, Fuller is concerned with delivering data from a device driver to an application within a computer. In Fuller, an application consumes data from a data queue. If the data in the data queue is low, the device driver places more data in the data queue for consumption by the application. The fact that the data source for the device driver may be from a network is irrelevant to the operation of the data queue between the device driver and the application. That

is, when the data is low in the data queue, the device driver provides more data (e.g., from an input buffer) to the data queue. The Examiner has not provided any basis from Fuller indicating that this operation of the data queue between the device driver and the application affects the transfer of data from an external network source.

E) Conclusion

Because claims 1-29 are patentable over Minyard, Rothschild, and Fuller for at least the reasons cited hereinabove, Appellants respectfully request that the rejection of the claims be reversed and the claims allowed.

Respectfully submitted,

/John S. Golian/

John S. Golian
Reg. No. 54,702

SHOOK, HARDY, & BACON L.L.P.
2555 Grand Blvd.
Kansas City, MO 64108-2613
Tel.: 816/474-6550